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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/356,997	07/20/1999	JOHN C. THACKER	CY-98055	8562

7590

01/02/2002

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EXAMINER

NAJJAR, SALEH

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 01/02/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

H.G.

14.6

**Office Action Summary**

Application No.

09/356,997

Applicant(s)

THACKER ET AL.

Examiner

Saleh Najjar

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-4, 13, 14, 17 and 19 is/are rejected.
- 7) ☒ Claim(s) 5-8, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

1. In view of the appeal brief filed on October 12, 2001, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (a) file a reply under 37 CAR 1.111 (if this Office action is non-final) or a reply under 37 CAR 1.113 (if this Office action is final); or,
- (b) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CAR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CAR 1.193(b)(2).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 13-14, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humphrey, U.S. Patent No. 5,987,233 in view of Becker et al., U.S. Patent No. 5,878,223 (which were cited by the examiner as prior art in paper No. 2, and 6).

Humphrey teaches the invention substantially as claimed including a satellite broadcasting system combined with servers known as cache or proxy servers located at the client at client site which serve to store data from the network until the client

requests the data and a master cache center which coordinates the selection and transmission of information to the cache sites (see abstract).

As to claim 1, Humphrey teaches a caching system for use with a data distribution system, comprising:

a master cache for receiving content for distribution by the data distribution system to one or more users (see fig. 2; col. 4, Humphrey discloses master cache 21 that stores content to be distributed to local caches);

a **satellite link** for receiving content that is distributed by the data distribution system from the master cache (see fig. 2; col. 4);

one or more local caches for storing the content received by the satellite link destined for the one or more users (see fig. 2; col. 4, Humphrey discloses local caches 25 that receive content from master cache through satellite link);

harvesting software coupled to the master cache and the **satellite link** for processing information corresponding to **misses/hit** data that the local caches satisfy requests from their respective users to predictively distribute the desired content to the respective users (see col. 5, lines 15-35, Humphrey discloses that the master cache records all the information regarding the miss and measures the amount of interest in the information or data from the local caching system).

Humphrey fails to teach the claimed limitation of **probability distributions**.

However, Becker teaches a system and method for predictive caching of information pages at an interim computer located between the client computers and the server source using prediction tables so that pages are sent to the client without specific request by the client (see summary). Becker teaches using a probability table at the interim computer having entries representing historical probability values for selection of a page by the client (see figs. 1-6; col. 8-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Humphrey by implementing probability tables at the satellite link in view of Becker so that pages are predictively obtained at the master cache. One would

be motivated to do so to predict future requests of data based on user explicit request for data.

Humphrey does not explicitly disclose a gateway connected to the master cache.

However, "Official Notice" is taken that the concept and advantages of using a Gateway to connect a resource distribution network to a subscriber or client network is old and well known in the network communication art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Humphrey by replacing the uplink with a gateway server to connect the local cache with the master cache center. One would be motivated to modify Humphrey by including a gateway that connects the local caching system to the master cache system to allow data to flow between different networks.

As to claim 2, Humphrey teaches a caching system for use with a data distribution system as in claim 1 above, wherein the harvesting software processes information contained in transmit hit/miss data generated at the master cache (see col. 5, Humphrey discloses that the cache adapter 27 reports to the master cache information regarding the miss of data requested by clients which is recorded at the master cache).

Humphrey fails to teach the claimed limitation of **probability tables**.

However, Becker teaches a system and method for predictive caching of information pages at an interim computer located between the client computers and the server source using prediction tables so that pages are sent to the client without specific request by the client (see summary). Becker teaches using a probability table at the interim computer having entries representing historical probability values for selection of a page by the client (see figs. 1-6; col. 8-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Humphrey by implementing probability tables at the satellite link in view of Becker so that pages are predictively obtained at the master cache. One would

be motivated to do so to to predict future requests of data based on user explicit request for data.

As to claims 3-4, Humphrey teaches a caching system for use with a data distribution system as in claim 1 above.

Humphrey does not explicitly disclose the limitation of HTTP and NTTP objects. Humphrey does disclose that the content distributed by the master cache is Internet content.

"Official Notice" is taken that the concept and advantages of distributing HTTP or NTTP objects to data networks is old and well known in the network communication art. Therefore, it would have been obvious too one of ordinary skill in the art at the time of the invention to modify Humphrey to include HTTP and NTTP objects in the data distributed by the master cache 21 since. One would be motivated to do so since HTTP and NTTP objects are well known and familiar formats for information on the Internet.

Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13-14 do not teach or define any new limitations above claims 1-2 and therefore are rejected for similar reasons.

Claims 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 17, and 19, Humphrey teaches the system of claims 1 and 13 respectively wherein the data distribution system, ,comprises a satellite based data distribution system (see fig. 1).

**4.** Claims 9-12, and 18 are allowed

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Distributed system and method for prefetching objects by Carneal et al., U.S. Patent No. 6,282,542.
- Anticipatory caching by Facq et al., U.S. Patent No. 6,016,520.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AN MENG AI, can be reached on (703) 305-9678. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600. The fax number for the After-Final correspondence/amendment is (703) 746-7238. The fax number for official correspondence/amendment is (703) 746-7239. The fax number for Non-official draft correspondence/amendment is (703) 746-7240.



Saleh Najjar  
Examiner Art Unit 2154